THERMAL WATER TREATMENT

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ABSTRACT

A thermal treatment system for supplying thermally conditioned or purified water for human or animal consumption, industrial processes, environmental containment, or removal of foreign species. The water purifier includes a heat exchanger for exchanging heat between outgoing thermally conditioned or purified water and incoming makeup water; a water heater is connected to the heat exchanger so as to receive pre-heated incoming makeup water, where the water heater subsequently heats the incoming preheated makeup water to a set-point temperature in the case of thermally conditioned water and for purified water also holds the water for a period of time sufficient to inactivate selected organisms to a predetermined level. The heat exchanger has one or more treated water outlets for supplying thermally conditioned or purified water at selected temperatures.